ABSTRACT

System for frequency adjustment of piezoelectric resonators by ion etching in vacuum, based on arranging the resonators in rows and columns on a tray that can be moved to simultaneously expose two rows of resonators to the two straight-track portions of an ion gun having a race-track-shaped beam pattern whose straight tracks are spaced at an integer multiple of the inter-row spacing d. As the tray is moved in steps of d, two rows can be etched simultaneously, and each row can be sequentially exposed to a "pre-etch" and "final-etch" stage, with time between the two stages for the resonators to cool down after the "pre-etch" stage.